

Name \_\_\_\_\_ Period \_\_\_\_\_

**Geometry Unit 6 Worksheet #4 – Proportions review**

**For #1 - 3, simplify the ratio. Be sure to convert units if necessary!**

1)  $\frac{13ft}{8in}$

2)  $4gallons : 36quarts$

3)  $\frac{8oz}{6lbs}$

**For #4-6, write the ratio in lowest terms. Make sure you are using the same units!!!**

4) A rectangular swimming pool is 28 feet long by 12 feet wide. What is the ratio of the length to the width of the pool, in simplest form?

5) Out of 1000 households, 520 had at least one dog or cat. What is the ratio of pet owners to households? What is the ratio of pet owners to non-pet owners?

6) On the floor plans for a house, the length of a room is 4 inches. The actual room length is 7.5 yards. What is the ratio of the plans to the actual room?

**For #7-12, solve each proportion for the variable. Round to the nearest hundredth.**

7)  $\frac{8}{x} = \frac{4}{5}$

8)  $\frac{x}{10} = \frac{5}{7}$

9)  $\frac{8}{2} = \frac{x-8}{3}$

10)  $\frac{5}{n-4} = \frac{3}{9}$

11)  $\frac{p}{p-2} = \frac{4}{2}$

12)  $\frac{5}{8} = \frac{c-9}{c}$

For #13-15, use proportions to solve each equation. Round to the nearest hundredth.

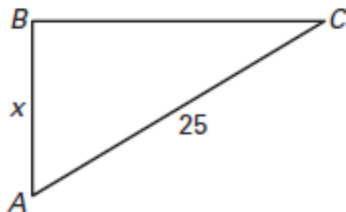
- 13) If 4.5 gallons cost \$13.25, how much will 2 gallons cost?
- 14) There are 237 senior girls at a high school. The ratio of girls to boys in the senior class is 3:4. How many seniors are boys?
- 15) Mike is having a 3 inch (length) by 5 inch (width) photograph enlarged so that the width is 18.5 inches. What is the length of the enlargement?

For #16 – 17, Find the measures of the angles.

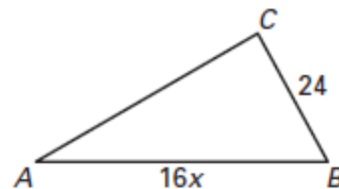
- 16) The ratio of the angles of a triangle are 5:7:8. Find each angle.
- 17) The ratio of the angles of a triangle are 3:5:2. Find each angle.

For #18 and 19, use the ratio of the sides to solve for the variable.

- 18)  $AB:AC$  is 3 : 5.



- 19)  $AB:CB$  is 2 : 1.



- 20) What does it mean if two triangles are congruent? Give one example of a way two triangles would not be congruent?